What is Claimed Is:

1. An ophthalmic formulation, comprising:

a first active compound characterized by (a) its ability to reduce dilation of a human eye exposed to a low light environment as compared to dilation which naturally occurs absent the compound and (b) generating a redness response of about +1 or less on a scale of 0 to +4.

2. The formulation of claim 1, wherein the first active compound is an imidazoline.

3. The formulation of claim 2, wherein the imidazoline is selected from the group consisting of Phentolamine and Tolamine.

4. The formulation of claim 3, wherein the first active compound is phentolamine.

5. The formulation of claim 4, further comprising a second active compound characterized by its ability to reduce eye redness in a human eye.

6. The formulation of claim 5, wherein the second active compound is a tetrahydrozoline.

7. The formulation of claim 6, wherein the second compound is tetrahydrozoline hcl.

8. The formulation of claim 7, further comprising:

an aqueous solvent.

9. The formulation of claim 8, wherein the aqueous solvent is an artificial tear solution.

10. A method of modulating pupil dilation, comprising:

administering to an eye of a patient a formulation comprising a first compound characterized by its ability to disrupt an endogenous compound which stimulates a dilator muscle of the eye; and

allowing the formulation to remain in contact with the eye for a period of time and under lighting conditions where the dilator muscles would be stimulated in the absence of the formulation;

wherein the formulation as administered to a human eye elicits a redness response rating of +1 or less.

11. The method of claim 10, wherein the compound is an imidazoline.

12. The method of claim 10, wherein the formulation further comprises a second compound characterized by its ability to reduce eye redness.

13. The method of claim 12, wherein the second compound characterized by its ability to reduce eye redness is tetrahydrazolene.

14. The method of claim 10, wherein the formulation is administered in an amount so as to optimize pupil diameter in dim light to no more than 5 mm and pupil diameter in bright light to no less than 1 mm.

15. The method according to claim 14, wherein said optimized pupil diameter in dim light is between and including 3 mm and 5mm.

16. The method of claim 10, wherein the administering is carried out once a day within one hour of less prior to the patient going to sleep.

17. The method of claim 10, wherein the administering is carried out once a day within one hour or less after the patient awakens from sleep

18. A method for optimizing pupil diameter in dim light by minimizing its dilatation in response to less light, comprising administering a therapeutically effective amount of an imidazoline to an eye of a person in need thereof.

19. The method according to claim 18, wherein said dilatation of the pupil diameter in dim light is minimized in response to less light compared with bright light, and wherein said method does not induce ciliary muscle contraction.

20. The method of claim 19, wherein the imidazoline is selected from the group consisting of Phentolamine and Tolamine.

21. The method of claim 19, wherein the imidazoline is phentolamine.

22. The method of claim 21, further comprising:
administering tetrahydrozoline hcl.

23. A method of modulating pupil dilation, comprising:
administering to an eye of a patient a formulation comprising a compound characterized by (a) its ability to disrupt endogenous compounds which stimulate dilator muscles of the eye and (b) eliciting a redness response of +1 or less on a scale of from 0 to +4; and

allowing the formulation to remain in contact with the eye for a period of time and under lighting conditions where the dilator muscles would be stimulated in the absence of the formulation.

24. The method of claim 23, wherein the compound is an imidazoline.

25. The method of claim 23, wherein the formulation further comprises a compound characterized by its ability to reduce eye redness.

26. The method of claim 25, wherein the compound characterized by its ability to reduce eye redness is tetrahydrazolene.

27. The method of claim 23, wherein the formulation is administered in an amount so as to optimize pupil diameter in dim light to no more than 5 mm and pupil diameter in bright light to no less than 1 mm.

28. The method according to claim 27, wherein said optimized pupil diameter in dim light is between and including 3 mm and 5mm.

29. A method for optimizing pupil diameter in dim light by minimizing its dilatation in response to less light, comprising administering to an unmedicated human eye a therapeutically effective amount of an alpha 1 antagonist to an eye of a person in need thereof.

30. The method according to claim 29, wherein said dilatation of the pupil diameter in dim light is minimized in response to less light compared with bright light, and wherein said method does not induce ciliary muscle contraction.

31. The method according to claim 29, wherein the eye is of a patient which suffers from excessively large pupils in dim light.

32. The method according to claim 31, wherein the patient suffers from poor quality of vision.

33. The method according to claim 29, wherein the eye is of a patient that is naturally excessively dilated as a result of response to dimming of light.

34. A method of treatment, comprising:

subjecting the eye of a human patient to refractive surgery;

allowing the eye of the patient to recover; and

administering to the patient a formulation comprised of an active agent which blocks an endogenous compound which stimulates a dilator muscle of the eye wherein the formulation is a liquid formulation applied directly to the eye of the patient.

35. The method of claim 34, wherein the formulation is applied by means of an eye dropper.

36. The method of claim 34, wherein the refractive surgery is a surgical means selected from the group consisting of incision, laser ablation, and prosthesis implantation.

37. An ophthalmic, night vision formulation, comprising:

a sterile aqueous carrier;

a therapeutically effective amount of a first pharmaceutically active compound characterized by its ability to disrupt endogenous compounds which stimulate dilator muscles of a human eye; and

a second pharmaceutically active compound characterized by its ability to reduce redness in a human eye.

38. The ophthalmic formulation of claim 37, wherein the second active compound is tetrahydrazolene.

39. The formulation of claim 37, wherein the first active compound is selected from the group consisting of phentolamine and tolamine.

40. The formulation of claim 37, wherein the first active compound is an imidazoline present in a concentration in a range of from about 0.01 milligrams per cubic centimeter of aqueous carrier to about 50 milligrams per cubic centimeter of aqueous carrier and wherein the solvent comprises an ophthalmic artificial tear solution.

41. An eyedropper, comprising:

a hollow cylindrical barrel comprising a first end, a second end, and an inner surface;

a means for providing suction to draw an aqueous formulation into the hollow cylinder barrel, the first end of the barrel configured to receive the means for providing suction to draw the formulation, the barrel having a small opening at the second end configured to permit passage of the formulation;

wherein the formulation comprises an aqueous solvent and a compound characterized by (a) its ability to interfere with a biochemical reaction which results in stimulation of dilator muscles of a human eye, and (b) eliciting a redness response in a human eye of +1 or less on a scale of from 0 to +4.

42. The eyedropper of claim 41, wherein the inner surface of the barrel surrounds a volume of five cubic centimeters or less and the compound is an imidazoline.

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43. A method of reducing adverse visual effects of spherical aberrations on a human eye, comprising:

administering to a human eye a first active compound characterized by (a) its ability to reduce dilation of a human eye exposed to a low light environment as compared to dilation which naturally occurs absent the compound and (b) generating a redness response of about +1 or less on a scale of 0 to +4.